

IN THE CLAIMS

1 (Currently Amended). A method comprising:
receiving a series of sequential data elements in a predetermined order;
analyzing the data elements sequentially in the predetermined order to identify a
particular data element; and
sequentially storing said data elements in the predetermined order by either storing
the data elements in a first location or, if a data element is the particular data element, in a second
location different from said first location.
~~identifying a first data element to be removed from a data stream including other~~
~~data elements;~~
~~writing said first data element into a first buffer separate from one or more buffers~~
~~storing the other data elements; and~~
~~preventing the first data element from being read from said first buffer.~~

2 (Original). The method of claim 1 wherein identifying a first data element to be removed includes identifying the location of virtual local area network tags within the data stream.

3 (Previously Presented). The method of claim 1 wherein preventing the first data element from being read from said first buffer includes preventing said first data element from being written to any of said one or more buffers.

4 (Currently Amended). The method of claim 1 wherein preventing the first data element from being read from ~~any of~~ said first buffer includes writing the first data element into the first buffer and then overwriting said first data element in said first buffer with one of said other data elements.

5 (Previously Presented). The method of claim 1 wherein writing the other data elements into one or more buffers includes writing the other data elements into one or more other buffers having a size comparable to the size of said first data element.

6 (Original). The method of claim 1 including producing a contiguous uninterrupted output data stream with said first data element removed.

7 (Previously Presented). The method of claim 1 including receiving a data stream including said first data element and said other data elements and distributing said other data elements to a plurality of buffers.

8 (Previously Presented). The method of claim 7 including reading said other data elements out of said plurality of buffers through a multiplexer to generate a contiguous data stream.

9 (Original). The method of claim 1 including receiving a data unit that includes two data elements, storing one of said two data elements in a first buffer and the other of said two data elements in a second buffer.

10 (Original). The method of claim 9 including outputting one of said two data elements through a first multiplexer and outputting the other of said data elements through a second multiplexer.

11 (Currently Amended). An article comprising a medium storing instructions that enable a processor-based system to:

receive a series of sequential data elements in a predetermined order;

analyze the data elements sequentially in the predetermined order to identify a particular data element; and

sequentially store said data elements in the predetermined order by either storing the data elements in a first location or, if a data element is the particular data element, in a second location different from said first location.

~~identify a first data element to be removed from a data stream to include other data elements;~~

~~write said first data element into a first buffer separate from one or more buffers storing the other data elements; and~~

~~prevent the first data element from being read from said first buffer.~~

12 (Original). The article claim 11 further comprising a medium storing instructions that enable a processor-based system to identify the location of virtual local area network tags within the data stream.

13 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to prevent said first data element from being written to any of said buffers.

14 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to write the first data element into a buffer and then overwrite said first data element in said buffer with one of said other data elements.

15 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to write the other elements into buffers having a size comparable to the size of said first data element.

16 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to produce a contiguous uninterrupted output data stream with said first data element removed.

17 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to receive a data stream to include said first data element and other data elements and distribute said other data elements to a plurality of buffers.

18 (Original). The article of claim 17 further comprising a medium storing instructions that enable a processor-based system to read said data elements out of said buffers through a multiplexer to generate a contiguous data stream.

19 (Original). The article of claim 11 further comprising a medium storing instructions that enable a processor-based system to receive a data unit that includes two data elements, store one of said two data elements in a first buffer and the other of said two data elements in a second buffer.

20 (Original). The article of claim 19 further comprising a medium storing instructions that enable a processor-based system to output one of said two data elements through a first multiplexer and output the other of said data elements through a second multiplexer.

21 (Currently Amended). A system comprising:
a device to receive a plurality of data elements;
a plurality of buffers coupled to said device; and
a control to receive a series of sequential data elements in a predetermined order, analyze the data elements sequentially in the predetermined order to identify a particular data element, and sequentially store said data elements in the predetermined order by either storing the data elements in a first location or, if a data element is the particular data element, in a second location different from said first location.
~~a control to identify a first data element to be removed from a data stream to include other data elements, to write said first data element into a first buffer separate from one or more buffers storing the other data elements, and to prevent the first data element from being read from said first buffer.~~

22 (Original). The system of claim 21 wherein said system is an Ethernet adapter.

23 (Previously Presented). The system of claim 21 wherein said system to strip virtual local area network tags from said data stream.

24 (Previously Presented). The system of claim 21 wherein said control to prevent the first data element from being read from any of said buffers.

25 (Previously Presented). The system of claim 21 wherein said control to write the first data element into a first buffer of said buffers and then overwrites the first data element in said first buffer with one of said other data elements.

26 (Original). The system of claim 21 wherein said buffers have a size comparable to the size of said first data element.

27 (Original). The system of claim 21 wherein said system produces a contiguous uninterrupted output data stream with said first data element removed.

28 (Original). The system of claim 21 including at least one multiplexer coupled to said buffers to store said other data elements.

29 (Original). The system of claim 28 including an output multiplexer coupled to said buffers to generate a contiguous data stream.

30 (Original). The system of claim 29 including a pair of output multiplexers, data units received by said device being separated into a least two separated data units, said separated data units being output from different ones of said output multiplexers.

31 (Currently Amended). The system of claim 21 wherein the number of buffers equals the data clock size divided by the data size ~~a size of the data elements~~ times the quantity of one plus the number of data elements to be removed, where the data size is the size of data to be removed.

32 (Currently Amended). The system of claim 21 wherein the number of buffers equals the data clock size divided by the data size times the quantity of two plus the number of data elements to be removed, where the data size is the size of data to be removed.